

### ULTRAVIOLET MIRRORS(160nm to Far IR)

This coating is delicate, with a very thin layer of MgF<sub>2</sub> over the aluminum film to prevent oxidation. These will not withstand high energy excimer laser radiation. Clean carefully with methanol or acetone.

Part Number	Spectral Range	Dimensions	Coating/overcoat	Reflectance	Surface Flatness
MU-25	160 nm-Far IR	1" dia. X 1/4"	Al/MgF <sub>2</sub>	60-90%	1/4-wave
MU-51	160 nm-Far IR	2" dia. X 1/4"	Al/MgF <sub>2</sub>	60-90%	1/4-wave

### VISIBLE MIRRORS(380 nm to Far IR)

Our standard mirrors, with protective silicon monoxide overcoat on the aluminum film, meet eraser and adherence tests, with reflectance greater than 86% throughout the visible spectrum. Because of a small absorption dip near 800nm, we recommend our IR mirrors for use with NIR sources.

Part Number	Spectral Range	Dimensions	Coating/overcoat	Reflectance	Surface Flatness
M-25	380 nm-Far IR	1" dia. X 1/4"	Al/SiO	Above 86% throughout visible spectrum	1/4-wave
M-51	380 nm-Far IR	2" dia. X 1/4"	Al/SiO		1/4-wave
M-76	380 nm-Far IR	3" dia. X 1/2"	Al/SiO		1/4-wave
M-102	380 nm-Far IR	4" dia. X 3/4"	Al/SiO		1/4-wave
M-152	380 nm-Far IR	6" dia. X 1"	Al/SiO		1/4-wave

### INFRARED MIRRORS(700nm to Far IR)

Our infrared mirrors have hard, scratch-resistant gold mirror coatings giving a maximum of reflectance throughout the near and far IR to an average of 98.5%

Part Number	Spectral Range	Dimensions	Coating/overcoat	Reflectance	Surface Flatness
MR-25	700 nm-Far IR	1" dia. X 1/4"	Protected Gold	98.5%	1/4-wave
MR-51	700 nm-Far IR	2" dia. X 1/4"	Protected Gold	98.5%	1/4-wave

### HIGH-REFLECTANCE MIRRORS(425nm to Far IR)

This aluminized mirror has dielectric over layers which enhance reflectance in the visible spectrum to an average of 95% and which increase to 98% in the IR.

Part Number	Spectral Range	Dimensions	Coating/overcoat	Reflectance	Surface Flatness
MH-25	425 nm-Far IR	1" dia. X 1/4"	Al/dielectric	Above 95%	1/4-wave
MH-51	425 nm-Far IR	2" dia. X 1/4"	Al/dielectric	Above 95%	1/4-wave

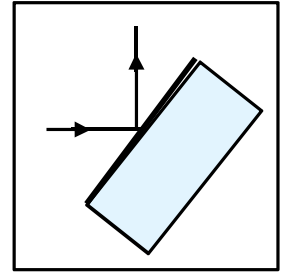
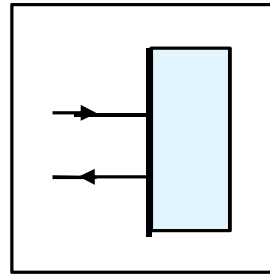
### HIGH-REFLECTANCE MIRRORS(425nm to Far IR)

These interferometer-quality mirrors are coated with our High-Reflectance Coating.

Part Number	Spectral Range	Dimensions	Coating/overcoat	Reflectance	Surface Flatness
MI-25	425 nm-Far IR	1" dia. X 1/4"	Al/dielectric	Above 95%	1/20-wave
MI-51	425 nm-Far IR	2" dia. X 1/4"	Al/dielectric	Above 95%	1/20-wave
MI-76	425 nm-Far IR	3" dia. X 1/2"	Al/dielectric	Above 95%	1/20-wave
MI-102	425 nm-Far IR	4" dia. X 3/4"	Al/dielectric	Above 95%	1/20-wave
MI-152	425 nm-Far IR	6" dia. X 1"	Al/dielectric	Above 95%	1/20-wave

### General Specifications

Substrate Material : Fused silica  
 Surface Figure :  $\lambda/10$  at 633nm (Typ.)  
 Surface Quality : 10-5 scratch & dig  
 Dimensional Tolerance : + 0.00mm, - 0.25mm  
 Thickness Tolerance :  $\pm 0.25$ mm  
 Clear Aperture : Center 90% of the diameter  
 Centration : <3 arc minutes



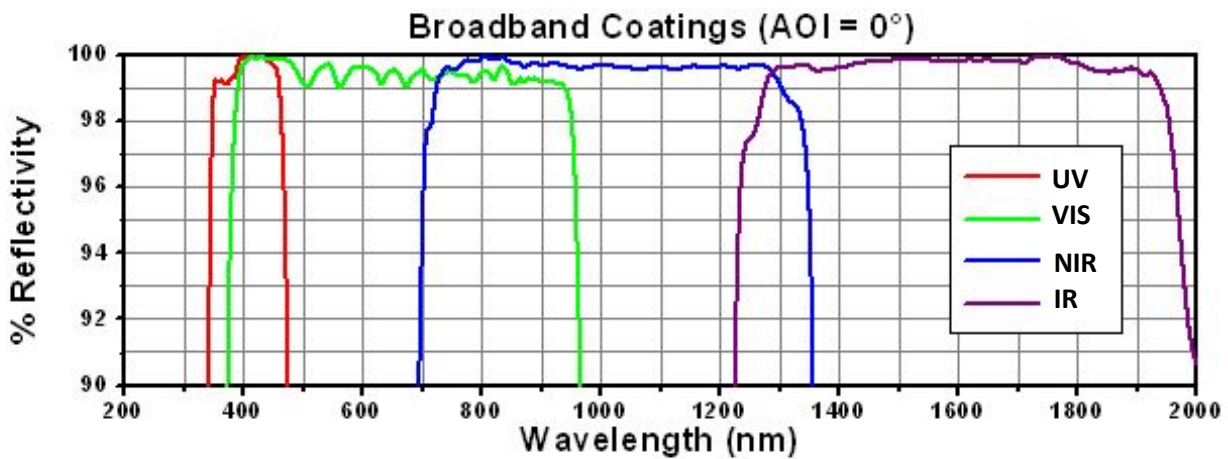
### Broadband MAX-R Reflectors for 0° and 45°

Part Number	Dimension	Reflectance
MXY-13-λ	0.5"dia. X 6mmT	>99%
MXY-25-λ	1"dia. X 6mmT	>99%
MXY-51-λ	2"dia. X 9mmT	>99%
MXY-76-λ	3"dia. X 12mmT	>99%
MXY-102-λ	4"dia. X 12mmT	>99%

\* 20 ns pulses, 10Hz

### Wavelength for Standard AR coatings Broadband

Wavelength range(nm)	Coating code
350-400	UV
400-750	VIS
750-1100	NIR
1280-1600	IR



### Order/Product Nomenclature

Part code      Diameter      coating code  
 MXY           

Ordering example : MXY-25-IR  
 : MXY-51-VIS